

NOAA, NATIONAL WEATHER SERVICE, WEATHER FORECAST OFFICE Miami, Florida 33165

South Florida Holiday Climatology

(Updated December 16th, 2011)

South Florida weather during the late December/early January holiday period is world-renowned for its typically dry and pleasant conditions. Average temperatures for the holiday period are as follows:

Location Average Low/High Temperature

Miami Int'l December/January: 60/77

SW Miami-Dade December/January: 56/77

Fort Lauderdale Int'l December/January: 62/77

Pembroke Pines December/January: 59/77

Palm Beach Int'l December/January: 58/75

Naples Muni. Apt December/January: 55/75

Moore Haven December/January: 53/74

LaBelle December/January: 49/74

Significant temperature variability can occur this time of year due to cold fronts which periodically move through the region. This variability can be noted in both the record minimum and maximum temperatures for December 25th and January 1st (indicated below). The Thanksgiving period is usually milder than the late December/January time frame, but exact timing of cold fronts can result in colder temperatures during certain times in November than in December/January.

Strong cold fronts followed by air masses of either arctic or polar in origin can affect South Florida during the holiday period, and some of the region's all-time coldest temperatures on record have occurred on or around December 25th. Examples of cold temperatures on Christmas Day include 1983 and 1989, when temperatures dropped to near or below the freezing mark over virtually all of south Florida, with maximum temperatures only reaching the 40s. Although snow has never been recorded on Christmas Day in south Florida, frost did develop on Christmas morning 1989. Frost was noted on vehicles and rooftops all across south Florida, making that day about as close to a "White Christmas" as south Florida can expect.

Air masses following cold fronts this time of year normally result in low temperatures in the 40s or lower 50s, with high temperatures in the 60s to around 70. Cold air masses usually don't linger for too long due to the modifying effects of both the Atlantic Ocean and Gulf of Mexico, with temperatures returning to near normal values 3-5 days after the coldest readings.

Conversely, during warm periods, temperatures have also reached the 80s during the holidays, making some Christmas and New Year's Days feel almost summer-like. This was the case during Christmas 2008 and 2009 when maximum temperatures reached the 80s over most of south Florida. Because of this variability in temperature, visitors are recommended to pack for both balmy and chilly weather.

Measureable precipitation (greater than 0.01 inches) falls on either December 25th or January 1st on a frequency of once every 3 to 6 years, depending on the location (see table below for exact values per location). Holiday season rainfall normally comes in association with cold fronts sweeping through the area, or from persistent and rather moist easterly winds blowing off the Atlantic Ocean. An example of rainfall with moist easterly winds occurred on Christmas Day 2008 when several south Florida locations received measureable rainfall, including over an inch (1.07) in West Palm Beach. Thunderstorms and severe weather are relatively rare during the holidays, but can accompany squall lines ahead of cold fronts.

Also, persistent and sometimes strong winds during this time of year can produce rip currents along both the southeast and southwest Florida coasts, and all beachgoers are strongly urged to check conditions before heading to the beach, as well as swim at guarded beaches.

Outlook for 2011-2012 Holiday Season

South Florida's mild December weather pattern is expected to continue throughout most of the week leading up to Christmas Day. A weak cold front will move through the area late Saturday night; nevertheless temperatures are forecast to be near to even slightly above normal (normal temperatures are lows in the 50s/lower 60s and highs in the 70s to near 80). Aside from a slight

chance of showers during the early to middle part of the week leading up to Christmas Day, typically dry December weather will prevail.

Breezy east winds are also expected to prevail for the next several days, which will lead to hazardous rip currents along the Atlantic beaches as well as choppy seas over all the south Florida local waters. Beachgoers and marine interests are urged to use caution and check with local lifeguards.

For Christmas weekend and as we approach New Year's Day, the extended 8-14 day outlook from the <u>Climate Prediction Center</u> calls for a slightly enhanced likelihood of below normal temperatures and near normal precipitation. Check back daily for updates to these extended outlooks.

Stay updated with the latest forecasts for south Florida and across the country as we approach the holiday period by going to the NWS Miami website at weather.gov/southflorida and clicking on the map in the front page for a detailed point forecast. You can also get a forecast for another part of the country by typing in a zip code or city and state in the white bar at the top left of the front page.

This outlook will be updated periodically between now and New Year's Day. For the latest holiday outlook, as well as other south Florida weather information including forecasts and warnings, please visit the National Weather Service in Miami website at http://weather.gov/southflorida

Below are the all-time and top 5 coldest, warmest and wettest days for December 25th and January 1st for select South Florida sites. (NOTE: Time period of records are as follows: Miami since 1895 [1911 for precipitation], Fort Lauderdale since 1912, West Palm Beach since 1888, Naples since 1942 and Moore Haven since 1918).

Record Daily Minimum Temperatures (Degrees F)

Date	Location					
	Miami	Fort Lauderdale	West Palm Beach	Naples	Moore Haven	
Dec 25	30 (1989)	29 (1989)	28 (1989)	28 (1989)	23 (1989)	
Jan 1	36 (1918)	34 (1918, 1949)	35 (1918)	39 (1981)	29 (2001)	

Record Daily Maximum Temperatures (Degrees F)

Date	Location						
	Miami	Fort Lauderdale	West Palm Beach	Naples	Moore Haven		
Dec 25	85 (1897)	89 (1931)	87 (1940)	87 (1987)	85 (1998)		
Jan 1	87 (1982)	86 (1982)	85 (1996)	86 (1983)	86 (1974)		

Top 5 Days with Coldest Average Daily Temperature (Degrees F)

Date	Location				
	Miami	Fort Lauderdale	West Palm Beach	Naples	Moore Haven
Dec 25	42.5 (1989)	42.0 (1989)	41.0 (1983)	39.5 (1983)	32.0 (1989)
	44.0 (1983)	43.5 (1983)	41.5 (1989)	40.5 (1989)	37.5 (1983)
	44.5 (1906)	46.5 (1995)	43.5 (1906)	47.5 (1995)	43.0 (1995)
	49.5 (1995)	50.5 (1963)	46.0 (1995)	49.5 (1966)	44.5 (1929)
	52.5 (1963)	51.5 (1961)	49.5 (1963)	50.0 (1963)	47.0 (1963)
Jan 1	46.5 (1918)	49.0 (1949)	45.5 (1898)	51.0 (1949)	41.5 (2001)
	51.5 (1949)	50.5 (1918)	47.5 (1918)	53.5 (1984)	46.0 (1949)
	52.5 (1896)	52.5 (2001)	50.5 (1895)	54.0 (1981)	48.5 (1984)
	54.5 (2001)	53.0 (1940)	50.5 (2001)	55.0 (1946)	50.5 (1927)
	55.5 (1984)	57.0 (1981)	51.0 (1949)	55.0 (1956)	52.0 (1981)

Top 5 Days with Warmest Average Daily Temperature (Degrees F)

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7)
8)
6)
2)
2)
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4)
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2)
1)
2

Top 5 Wettest Days (Inches)

Date	Location				
	Miami	Fort Lauderdale	West Palm Beach	Naples	Moore Haven
Dec 25	1.17 (1915)	1.11 (1992)	1.60 (1949)	0.30 (1957)	0.40 (1993)
	0.61 (1949)	0.97 (1936)	1.07 (2008)	0.21 (1985)	0.38 (1949)
	0.49 (2002)	0.80 (1949)	0.50 (1990)	0.19 (1978)	0.31 (1978)
	0.49 (1993)	0.65 (1959)	0.45 (2006)	0.14 (1959)	0.24 (1941)
	0.43 (2006)	0.50 (1948)	0.41 (1959)	0.09 (1979)	0.16 (2004)

Frequency of Measurable Precipitation (at least 0.01 inches) in years (once per X years)

	3.8	3.3	3.2	5.3	4.7	
Jan 1	1.87 (1931)	1.57 (1932)	1.58 (1993)	1.64 (2003)	1.95 (1987)	
	1.45 (1993)	1.13 (1931)	0.55 (1992)	1.10 (1987)	1.75 (2003)	
	0.66 (1972)	1.12 (1992)	0.40 (1958)	0.74 (2002)	1.68 (1932)	
	0.54 (1987)	0.75 (1993)	0.23 (1983)	0.66 (2010)	0.34 (1977)	
	0.45 (1932)	0.68 (1987)	0.15 (1962)	0.23 (1977)	0.25 (1928)	
Frequency of Measurable Precipitation (at least 0.01 inches) in years (once per X years)						
	4.4	3.9	4.6	7.0	5.0	